

CONFIDENTIAL

UNITED STATES DISTRICT COURT  
NORTHERN DISTRICT OF CALIFORNIA  
SAN JOSE DIVISION

THE APPLE IPOD ITUNES ANTITRUST LITIGATION )  
This Document Relates To: ) Case No. C 07-6507 JW  
ALL ACTIONS )  
 )  
 )

**Reply Affidavit of Gary L. French, Ph.D.,  
Regarding Class Certification**

## TABLE OF CONTENTS

Table of Exhibits.....	ii
I.    Introduction.....	1
A.    Qualifications.....	1
B.    Background.....	2
C.    Retention.....	3
D.    Assumptions and Additional Materials Considered .....	3
II.    Common Proof of Impact and Liability.....	5
A.    Dispersion in iPod Retail Prices Does Not Preclude Common Proof of Impact .....	5
1.    Economic Theory Predicts and Explains Price Dispersion.....	5
2.    Price Dispersion Would Exist Regardless of Apple's Alleged Misconduct.....	7
3.    iPod Prices at Major Retailers Exhibit Less Variation than Defendant's Anecdotal Evidence Implies .....	7
4.    Price Dispersion Does Not Preclude Econometric Analysis of Overcharges and Pass-Through to Indirect Purchasers .....	8
B.    [REDACTED].....	9
C.    Numerous Other Defendant Criticisms Are Inaccurate or Irrelevant .....	11
1.    Defendant's Criticism That Use of Averages Masks Variation Is Unwarranted.....	11
2.    Common Impact Does Not Require Universal Lock-In .....	14
3.    [REDACTED].....	16
III.    Feasible Methods to Estimate Class-Wide Damages on a Common Basis .....	18
A.    The French Affidavit Proposed Appropriate Benchmarks .....	18
1.    The Yardstick Method Was Considered.....	18
2.    Economic Analysis to Determine the Impact Period Is Routine .....	19
B.    Third-Party Retail Price Data to Perform the Proposed Analyses Are Available .....	19
IV.    Conclusions.....	20

## TABLE OF EXHIBITS

Exhibit 1      Recent Advertised Retail Prices of Portable Digital Music Players by  
[REDACTED]

Exhibit 2      [REDACTED]  
[REDACTED]

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**Reply Affidavit of Gary L. French, Ph.D.,  
Regarding Class Certification**

STATE OF VIRGINIA )  
 ) SS.:  
COUNTY OF ARLINGTON )

Gary L. French, Ph.D., being duly sworn, deposes and says,

**I. INTRODUCTION**

**A. Qualifications**

1. I am senior vice president and consulting economist at Nathan Associates Inc., a consulting firm established in 1946 that provides economic and financial research and analysis to public and private clients in the United States and abroad. My qualifications and experience, as well as a list of the matters in which I have testified over the last four years, are contained in the text and an appendix of my

expert report concerning class certification that Plaintiff<sup>1</sup> submitted on February 23, 2009 (“French Affidavit”).<sup>2</sup>

## B. Background

2. The French Affidavit described economic evidence and analysis showing that any impact on and damages incurred by members of the proposed class of indirect purchasers of the Apple<sup>3</sup> iPod due to Apple’s alleged misconduct would be established using common proof and common methodologies. Defendant’s counsel deposed me on April 3, 2009.<sup>4</sup> On April 20, 2009, Defendant filed its memorandum opposing Plaintiff’s motion for class certification (“Opposition Memorandum”).<sup>5</sup>
  
3. Since the French Affidavit was filed, Apple implemented a policy affecting the Apple iTunes Music Store (“iTMS”) originally announced in January 2009.<sup>6</sup> Under the changes that took effect on April 7, 2009, Apple removed the digital rights management (“DRM”) from digital music sold through iTMS, charged iTMS customers a fee to upgrade previously purchased DRM-protected digital audio files

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<sup>1</sup> Stacie Somers is referred to herein as “Plaintiff.”

<sup>2</sup> United States District Court for the Northern District of California, San Jose Division, *The Apple iPod iTunes Antitrust Litigation.*, Case No. 07-6507 (JW), Affidavit of Gary L. French, Ph.D., February 23, 2009.

<sup>3</sup> Apple Inc. is referred to herein as “Apple” or “Defendant.”

<sup>4</sup> United States District Court for the Northern District of California, San Jose Division, *Stacie Somers v. Apple Inc.*, Case No. 07-6507 (JW), Deposition of Gary L. French, Ph.D., April 3, 2009 (hereinafter, “French Deposition Transcript”).

<sup>5</sup> United States District Court for the Northern District of California, San Jose Division, *Stacie Somers v. Apple Inc.*, Case No. 07-6507 (JW), Defendant’s Memorandum in Opposition to Motion for Class Certification, April 20, 2009.

<sup>6</sup> French Aff. at 16, 34 and 42.

to DRM-free versions, and introduced a three-tier pricing scheme (with each title priced at \$0.69, \$0.99 or \$1.29).<sup>7</sup>

### **C. Retention**

4. Counsel for Plaintiff has asked me to consider and evaluate the economic arguments propounded in Defendant's Opposition Memorandum, specifically:
  - To comment on the issues of iPod retail price dispersion and reseller heterogeneity, among others, raised in the Opposition Memorandum; and
  - To address Defendant's criticisms regarding the damage methodology described in the French Affidavit, particularly Defendant's comments pertaining to potential competitive benchmarks, the commencement of the impact period, and the availability of data.
5. Nathan Associates continues to bill Plaintiff at a rate of \$450 per hour for my efforts and at the usual and customary rates for the time of other economists and analysts employed at Nathan Associates who have assisted in this analysis under my direction. As before, the compensation that Nathan Associates receives for these efforts is not contingent on the outcome of this matter.

### **D. Assumptions and Additional Materials Considered**

6. The formulation of this reply continues to rely on the assumption that, since April 2003, when Apple began to sell Fairplay DRM-restricted music content, Defendant tied sales of the Apple iPod to audio downloads sold through Apple's iTMS and

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<sup>7</sup> See, for example, Chmielewski, Dawn. "Hottest Tracks to Cost \$1.29 at iTunes Starting April 7," *Los Angeles Times*, March 26, 2009; Stone, Brad. "Making Sense of New Prices on Apple's iTunes," *The New York Times*, April 7, 2009; and *The Associated Press*. "Changes Take Effect in Apple's iTunes Prices," *MSNBC.com*, April 7, 2009.

monopolized and attempted to monopolize sales of portable digital audio players, as Plaintiff alleges. It is not merely assumed that the alleged violations impacted members of the proposed Class. As described herein and in the French Affidavit, economic analysis establishes that such impact would be shown by common proof.

7. In preparing this reply affidavit, I have reviewed or relied upon, in addition to the items listed in Appendix B in the French Affidavit, Defendant's Opposition Memorandum, the Court's recent Order in the direct purchaser action,<sup>8</sup> relevant industry press, and other materials cited herein. The opinions expressed in this affidavit may change if additional information warrants.

\* \* \*

8. This reply affidavit is organized as follows: Section II addresses issues that Defendant raised in its Opposition Memorandum concerning the existence of common proof of impact and liability. Section III revisits the questions of feasible methods and available data to estimate class-wide damages on a common basis. Section IV contains my conclusions.

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<sup>8</sup> United States District Court for the Northern District of California, San Jose Division, *The Apple iPod iTunes Antitrust Litigation.*, Case No. C 05-00037 (JW), Order Granting in Part Defendant's Motion for Judgment on the Pleadings; Ordering Supplemental Briefing, May 15, 2009.

## II. COMMON PROOF OF IMPACT AND LIABILITY

9. In its Opposition Memorandum, Defendant mistakenly claims that dispersion in the prices of Apple iPods and the number and variety of iPod retail outlets preclude common proof of impact and damages. In addition, Defendant makes erroneous arguments regarding the use of averages in the estimation of damages and the relevance of lock-in. [REDACTED]

### A. Dispersion in iPod Retail Prices Does Not Preclude Common Proof of Impact

10. The regression models proposed in the French Affidavit account for price dispersion, which is typical of many markets. Economic theory predicts and explains price dispersion, even for homogeneous products. Such price dispersion would exist whether or not Apple engaged in the misconduct alleged in Plaintiff's complaint. Moreover, the dispersion that Defendant identifies in the retail prices of the Apple iPod does not preclude reliable estimation of class-wide damages.

#### *1. Economic Theory Predicts and Explains Price Dispersion*

11. Economic theory predicts and numerous empirical economic studies have identified price dispersion in a variety of products. As the late Professor George Stigler

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<sup>9</sup> For example, [REDACTED]

theorized, price dispersion can arise as a consequence of the combination of search costs and imperfect information: When buyers incur search costs, the sellers of that particular product may price discriminate against consumers unwilling to incur the costs of searching for a lower price. Such price discrimination by sellers is one explanation that accounts for variation in the retail price of a given product, at a given moment in time.<sup>10</sup>

12. Imperfect information is a reality of most markets, including those for products sold both online and in “brick-and mortar” retail establishments. Empirical studies have found price dispersion among products and services as varied as airline tickets,<sup>11</sup> CDs and books,<sup>12</sup> digital cameras and flatbed scanners sold online,<sup>13</sup> and miscellaneous consumer goods.<sup>14</sup>
13. While the existence of search costs and imperfect information can explain differences in the prices of a specific iPod model at a point in time, differences in

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<sup>10</sup> Stigler, George (1961). “Economics of Information,” *Journal of Political Economy*, Vol. 69, pp. 213-225. See also Salop, Steven and Joseph Stiglitz (1977). “Bargains and Ripoffs: A Model of Monopolistically Competitive Price Dispersion,” *Review of Economic Studies*, Vol. 44, pp. 493-510; and Pratt, John W., David A. Wise and Richard Zeckhauser, (1979). “Price Differences in Almost Competitive Markets,” *Quarterly Journal of Economics*, Vol. 93, pp. 189-211.

<sup>11</sup> Clemons, Eric K., Il-Horn Hann and Lorin M. Hitt (1999). “The Nature of Competition in Electronic Markets: An Empirical Investigation of Online Travel Agent Offering,” working paper, The Wharton School, University of Pennsylvania.

<sup>12</sup> Brynjolfsson, Erik and Michael D. Smith (2000). “Frictionless Commerce? A Comparison of Internet and Conventional Retailers,” *Management Science*, Vol. 46, pp. 563-585.

<sup>13</sup> Baylis, Kathy and Jeffrey M. Perloff (2002). “Price Dispersion on the Internet: Good Firms and Bad Firms,” *Review of Industrial Organization*, Vol. 21, pp. 305-324.

<sup>14</sup> Pratt, John W., David A. Wise and Richard Zeckhauser, (1979). “Price Differences in Almost Competitive Markets,” *Quarterly Journal of Economics*, Vol. 93, pp. 189-211.

features, characteristics and capabilities also contribute to price differences across various iPod models.

***2. Price Dispersion Would Exist Regardless of Apple's Alleged Misconduct***

14. Given the differences in iPod models and the market realities of imperfect information in the market for portable digital music players, and given the differences in the costs that prospective purchasers of the Apple iPod would incur and are willing to incur to seek out the lowest price, it is axiomatic that dispersion would exist in the retail prices of Apple iPods, whether or not Apple engaged in the tying and monopolization conduct as alleged. The monopoly premium imposed by Apple's alleged misconduct would simply raise the range or distribution of iPod prices across the board.

***3. iPod Prices at Major Retailers Exhibit Less Variation than Defendant's Anecdotal Evidence Implies***

15. Empirical evidence collected from the websites or stores [REDACTED] [REDACTED] shows that the variation in the prices that the major retailers of iPods charge in the United States is typically nominal. As detailed in **Exhibit 1**, among Best Buy, Wal-Mart, Target, Circuit City, Costco Wholesale, RadioShack, Sam's Club, CompUSA and Amazon.com, there is modest variation in the advertised retail prices of four different models of Apple iPods (Classic, Nano, Touch and Shuffle) after accounting for memory size and generation of the technology. As Exhibit 1 shows, of these [REDACTED] seven appear to have essentially the same regular prices for most of the iPod models listed. Only Costco

Wholesale and Sam's Club, two warehouse clubs, have slightly lower prices. [REDACTED]

[REDACTED]

[REDACTED]

**4. *Price Dispersion Does Not Preclude Econometric Analysis of Overcharges and Pass-Through to Indirect Purchasers***

16. The dispersion in iPod prices that Defendant has pointed to in the marketplace is amenable to regression analysis to estimate a misconduct overcharge and pass-through to indirect purchasers. Accounting for potential systematic retail price differences among retailers is one reason the French Affidavit proposes to rely on retailer-specific data in these regression models. These data include Apple's direct purchaser iPod transaction data as well as monthly retailer-level MP3 player price data by brand and SKU.<sup>16</sup> The existence and availability of the latter were verified through direct inquiries with a data vendor, the NPD Group. The level of detail captured in these point-of-sale data permits granular analysis of the determinants of Apple iPod prices over time.
17. Defendant asserts that anecdotal variation in iPod retail prices is fatal to common proof of class-wide impact and common damage methodology. But regression analysis can control for differences in the level of retailer-specific pricing through the introduction of indicator or "dummy" variables.<sup>17</sup> In a regression model in

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<sup>15</sup> French Aff., Exhibit 5.

<sup>16</sup> French Aff. at 70-71.

<sup>17</sup> As described in note 65 of the French Affidavit, an indicator variable takes a value of one or zero based on whether the attribute in question, such as a particular retailer, is applicable to the data observation.

which the overcharge to members of the indirect purchaser class is directly measured,<sup>18</sup> such an indicator variable for each retailer can be included as an explanatory variable. Such an indicator variable would control for systematic differences in the level of retail prices at different retail outlets, and the regression result would show which retailers tend to charge higher or lower prices than their competitors. Similarly, various product features, characteristics, and capabilities can be included as explanatory variables in the regression model. The resulting regression model would yield an estimate of the anticompetitive overcharge percentage across the retailers and iPod models.

B. [REDACTED]

18. [REDACTED]

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<sup>18</sup> This regression model is described in the French Aff. at 69.

<sup>19</sup> French Aff., Exhibit 5.

<sup>20</sup> Opp. Memo., pp. 1, 4.

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

19. Second, as described above, in the direct approach to estimating the overcharge to indirect purchasers, the use of retailer indicator variables in regression analysis can account for systematic differences in the level of pricing of individual retailers. In the two-step approach to estimating the indirect purchaser overcharge, the direct purchaser price data can be matched to indirect purchaser data “by iPod model, month or quarter of purchase, and **retail outlet**” (*emphasis added*), as described in the French Affidavit.<sup>23</sup>

20. Ultimately, Defendant exaggerates [REDACTED]

[REDACTED] and by failing to consider the flexibility of multiple regression analysis, such as that proposed in the French Affidavit, to take such factors into account in a model of class-wide damages.

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<sup>21</sup> AF Services, LLC operates as a wholly-owned subsidiary of PC Mall, Inc. (PC Mall, Inc., 10-K, filed March 16, 2009, Exhibit 21.1). AF Services was previously characterized as a retailer in the French Affidavit. (French Aff. at 24).

<sup>22</sup> French Aff. at 24 and at Exhibit 5.

<sup>23</sup> French Aff. at 67-68.

### C. Numerous Other Defendant Criticisms Are Inaccurate or Irrelevant

21. In its Opposition Memorandum, Defendant offers additional criticisms of my analysis. As described in the first section below, [REDACTED]  
[REDACTED]  
[REDACTED] The second section addresses and responds to Defendant's contention that [REDACTED]  
[REDACTED] Additionally, [REDACTED]  
[REDACTED] as explained in the third section below.

#### *1. Defendant's Criticism That Use of Averages Masks Variation Is Unwarranted*

22. [REDACTED]  
[REDACTED]  
[REDACTED]  
[REDACTED]  
[REDACTED]  
[REDACTED]  
[REDACTED]  
[REDACTED]  
[REDACTED]  
[REDACTED]

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24 [REDACTED]

<sup>25</sup> United States District Court for the Southern District of Texas, Houston Division, *Pioneer Valley Casket Company, Inc., et al. v. Service Corporation International, et al.*, Civil Action No. H-05-3399.

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

23. There is no similarity in the impact and damage methodologies employed in *Pioneer Valley* and those proposed here. *Pioneer Valley* involved the refusal of the top three manufacturers of caskets to sell to independent casket distributors (“ICDs”) pursuant to an alleged conspiracy among the manufacturers and funeral homes. For reasons explained in my four expert reports in that case, not having access to the top manufacturers’ caskets put the ICDs at a competitive disadvantage to funeral homes and prevented their sales from being as large as they would have been otherwise. Thus, the measure of impact and damages to the proposed ICD class was the lost profits on lost casket sales by ICDs.

24. The judge relied on the magistrate judge’s Memorandum and Recommendation of November 24, 2008, to deny class certification in his March 26, 2009 order. The magistrate argued against class certification, in part, because my proposed sample survey of ICDs could not, in his view, be used to “prove the fact of damages as to every class member.”<sup>26</sup> Nor did the magistrate believe that a lost profit damage methodology using an average ICD profit margin could take account of other

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<sup>26</sup> United States District Court for the Southern District of Texas, Houston Division, *Pioneer Valley Casket Company, Inc., et al. v. Service Corporation International, et al.*, Civil Action No. H-05-3399, Memorandum and Recommendation, November 24, 2008 (“Memorandum and Recommendation”), p. 27.

factors affecting an ICD's profitability.<sup>27</sup> However, no survey methodology is being proposed to estimate damages in the present case. Rather, a multiple regression model would be employed that would indeed separate the influence of Defendant's conduct on iPod prices from other factors that cause price variations, such as the market variables measuring demand and supply conditions, features and characteristics of the various iPod models, and the retailers selling the iPod. Thus, no average price of iPods analogous to the average profit margin proposed in *Pioneer Valley* would be employed. Rather, the regression model would measure the effect of Defendant's conduct on iPod prices separately from the influence of other factors influencing iPod prices.

25. [REDACTED]

[REDACTED] As described in the French Affidavit, the NPD Group's retail price data is collected at the individual retailer level for specific models of MP3 players (at the SKU level).<sup>29</sup> During the deposition, I testified that the NPD Group [REDACTED]<sup>30</sup> and [REDACTED] The

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<sup>27</sup> Memorandum and Recommendation, pp. 13, 23-24.

<sup>28</sup> [REDACTED]

<sup>29</sup> French Aff. at 70-71.

<sup>30</sup> [REDACTED]

<sup>31</sup> [REDACTED]

data are thus a panel of point-of-sale prices, by retailer, by month, and by SKU. Through multiple telephone conversations conducted with representatives of the NPD Group prior to the filing of the French Affidavit, it was verified that the NPD Group reports monthly retail data at the SKU and retailer level. [REDACTED]

[REDACTED]  
[REDACTED] are therefore unwarranted.

## ***2. Common Impact Does Not Require Universal Lock-In***

26. [REDACTED]  
[REDACTED]  
[REDACTED]<sup>33</sup> In advancing this argument, Defendant disregards the proposed methodology and Plaintiff's allegation, which states that lock in of a sufficient number of iPod purchasers can yield market-wide effects in the price of the iPod, effects that would impact all indirect purchasers. Whether such lock-in occurred sufficiently to affect the market price for the iPod is a question common to all indirect purchasers that, as proposed in the French Affidavit, is answerable by common evidence and analysis. Thus, even if the question of whether an individual were locked in to the iPod were to be answered according to idiosyncratic facts, the issue would be irrelevant to the determination of common proof of class-wide impact.

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<sup>32</sup> [REDACTED]

<sup>33</sup> [REDACTED]

27. Under Plaintiff's allegations, common proof of impact does not require that all iPod purchasers were locked in. Common proof derives from a subset of purchasers being sufficiently locked in to the iPod due to Apple's alleged market power in the downloadable digital music segment to have elevated their willingness to pay for a given iPod or to prefer an iPod over another brand of portable digital music player. If the preferences of a sufficiently large proportion of iPod purchasers were distorted in this fashion by Defendant's conduct, then this change in preferences and behavior could elevate the demand and therefore the market prices for iPods above the prices that would have prevailed but for Apple's conduct.
28. The questions relevant to common impact in this matter therefore rely on evidence common to members of the proposed class. Such questions for the tying claim may include: (i) does the Defendant possess market power in downloadable digital music, (ii) whether iPod purchasers changed their preferences and behavior in response to the tie (or does a tie exist for some iPod consumers), and (iii) whether and to what degree these changes in consumer preferences and behavior inflated the prevailing retail price of the iPod. For the monopolization claim, questions that would be examined with common evidence include: (i) whether the DRM that protected music purchased from iTMS locked in consumers to iPods and excluded these consumers from considering other brands of portable digital music players, (ii) whether lock-in resulted in higher demand for and prices of Apple iPods, and (iii) whether the lock-in and the elevation in demand were sufficient to enable

Apple to achieve monopoly power in the portable digital music player market.

Thus, Apple's claim that impact must be proven at the individual level and cannot be proven at the market level is inaccurate, given that the consequence of the alleged tie was to distort the prices that Apple could command for iPods.

3. [REDACTED]

29. [REDACTED]

[REDACTED] On the contrary, at no point have I asserted that pass-through from direct purchasers to indirect purchasers requires [REDACTED]

[REDACTED]<sup>35</sup> Contrary to

Defendant's interpretation, the question of [REDACTED]

[REDACTED]  
[REDACTED]  
[REDACTED]  
[REDACTED]  
[REDACTED]  
[REDACTED]  
[REDACTED]

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34 [REDACTED]

<sup>35</sup> French Aff. at 28.

30. Implicit in many economic and marketing studies is that advertised prices convey information to consumers and influence the price that consumers expect to pay for a product.<sup>36</sup> Long-standing empirical economic research also shows that price advertisements tend to lower the prices that consumers pay for numerous products.<sup>37</sup>

However, the French Affidavit proposes econometric methods that explicitly rely on transaction or point-of-sale data to establish common impact and damages for the proposed Class of indirect purchasers.

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<sup>36</sup> See, for example, Carlton, Dennis W. and Jeffrey M. Perloff. *Modern Industrial Organization: Fourth Edition*. Pearson: Addison-Wesley, Boston, 2005 (hereinafter, “Carlton and Perloff”), p. 474; Compeau, Larry D, Dhruv Grewal and Rajesh Chandrashekaran (2002). “Comparative Price Advertising: Believe It or Not,” *Journal of Consumer Affairs*, Vol. 36, No. 2, pp. 284-294; Buehler, Stefan and Dennis L. Gärtner (2009). “Making Sense of Non-Binding Retail-Price Recommendations,” *SSRN Working Paper* (available at <http://ssrn.com/abstract=1351138>).

<sup>37</sup> For a brief survey of this research, see Carlton and Perloff, p. 481.

### III. FEASIBLE METHODS TO ESTIMATE CLASS-WIDE DAMAGES ON A COMMON BASIS

31. The damage methodologies proposed in the French Affidavit are consistent with long-standing and conventional empirical methods that economists have used to compute damages on a class-wide basis in a litigation setting.<sup>38</sup> Nevertheless,

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

#### A. The French Affidavit Proposed Appropriate Benchmarks

##### 1. The Yardstick Method Was Considered

32. [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED] This claim reveals an incomplete reading of the French Affidavit, which specifically states, “The yardstick approach may compare iPod pricing in the United States with the pricing of another product (**such as other MP3 players**)....” (*emphasis added*).<sup>40</sup> Defendant’s criticism is therefore invalid.

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<sup>38</sup> Multiple regression analysis is a statistically tool widely used in litigation settings, especially in class action antitrust cases. See, for example, Rubinfeld, Daniel L. (2000). “Reference Guide on Multiple Regression,” *Reference Manual on Scientific Evidence*, 2<sup>nd</sup> edition, Federal Judicial Center, pp. 179–227; and Baker, Jonathan B. and Daniel L. Rubinfeld (1999). “Empirical Methods in Antitrust Litigation: Review and Critique,” *American Law and Economics Review*, Vol. 1, pp. 386-435 at 391-393.

<sup>39</sup> [REDACTED]

<sup>40</sup> French Aff. at 65.

## **2. Economic Analysis to Determine the Impact Period Is Routine**

33. [REDACTED]

[REDACTED] However, it is customary for econometricians constructing damage models to test for the beginning of the impact period by examining statistical evidence of the behavior of prices with guidance from textual evidence (such as that which further discovery may yield in this matter) about the timing of the alleged misconduct. As described in deposition testimony, possible start dates for the impact period include April 2003, when iTMS became available for Mac users and October 2003, when iTMS became available for Windows users. As I further testified, it is more relevant to determine at what point after iTMS was introduced was Apple able to achieve market power in downloadable digital music by establishing iTMS and seeing demand for downloadable digital music grow by a “quantum leap.”<sup>42</sup> This question can be rigorously addressed using regression analysis such as that described in the French Affidavit.<sup>43</sup>

## **B. Third-Party Retail Price Data to Perform the Proposed Analyses Are Available**

34. The French Affidavit notes that the price data to construct and execute the proposed damage models included Apple’s direct purchaser transaction prices for the iPod from October 2001 until the present and retail price data for the iPod, such as that

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<sup>41</sup> [REDACTED]

<sup>42</sup> French Dep. Tr., pp.80:7-85:7.

<sup>43</sup> French Aff. at 65-69.

collected by the NPD Group. Notwithstanding Defendant's accusation to the contrary, the availability of retail price data for MP3 players from the NPD Group was verified during several phone calls with NPD Group employees prior to the French Affidavit's filing, as described above. Defendant's claim that I failed to confirm the existence of iPod retail data is therefore inaccurate.

#### **IV. CONCLUSIONS**

35. After considering the arguments presented in Defendant's Opposition Memorandum, I maintain the conclusions I reached in my initial report that:

- a. Proof of whether the proposed Classes have been economically injured by Apple's alleged misconduct would be common to Class members, and that such common proof would predominate over any individual questions;
- b. There are feasible methodologies and data to calculate aggregate damages to the Indirect Purchaser Damages Class on a common basis; and
- c. Economic analysis of liability issues would be common to all Class members.

Gary L. French

Gary L. French

Subscribed in my presence and sworn to before me on this 1<sup>st</sup> day of May, 2009, in Arlington, Virginia.

Margaret L. Spriggs  
Notary Public

My commission expires on 10/31/2010.



Exhibit 1. Recent Advertised Retail Prices of Portable Digital Music Players [a]

Player	Best Buy		Wal-Mart	Target	Circuit City		Costco Wholesale		RadioShack	Sam's Club	CompUSA	Amazon.com	
	Price	Sale Price	Price	Price	Price	Sale Price	Price	Sale Price	Price	Price	Price	Price	Sale Price
iPod Classic - 120GB	249.99	-	247.88	249.99	249.99	-	239.99[b]	224.99[b]	249.99	236.87	249.99[c]	249.99	229.99
iPod Classic - 160GB	-	-	-	-	299.99	227.99	-	-	279.97	-	-	349.00	332.15
iPod Nano - 8GB - 4th Gen	149.99	-	147.88	149.99	149.99	146.99	139.99[b]	133.99[b]	149.99	139.63	139.99, 149.99[c]	149.99	144.99
iPod Nano - 16GB - 4th Gen	199.99	-	197.88	199.99	199.99	-	-	-	199.99	-	199.99[c]	199.99	182.99
iPod Touch - 8GB - 2nd Gen	229.99	-	227.88	229.99	299.99	226.99	219.99[b]	214.99[b]	229.99	-	229.99[c]	229.99	224.99
iPod Touch - 16GB - 1st Gen	279.99	229.99	-	-	-	-	-	-	-	-	-	299.99	289.99
iPod Touch - 16GB - 2nd Gen	299.99	-	297.88	299.99	299.99	296.99	289.99[b]	279.99[b]	299.99	-	299.99[c]	319.99	-
iPod Touch - 32GB - 2nd Gen	399.99	-	397.88	399.99	399.99	-	389.99[b]	-	399.99	377.00	399.99[c]	399.99	369.88
iPod Shuffle - 1GB	49.99	-	48.72	49.99	-	-	-	-	49.99	46.78	-	49.00	45.00
iPod Shuffle - 2GB	69.99	-	68.72	69.99	-	-	-	-	-	-	-	69.99	64.00

[a] Unless otherwise noted, data reflect online prices advertised on retailers' respective websites during December 2008. Prices of refurbished models and bundled products are not included.

[b] Data reflect in-store prices posted on May 16, 2009 at Costco Wholesale location in Frederick, Maryland.

[c] Data reflect online prices advertised on retailer's website during May 15, 2009. Prices of refurbished models and bundled products are not included.

Sources: [www.bestbuy.com](http://www.bestbuy.com), [www.walmart.com](http://www.walmart.com), [www.target.com](http://www.target.com), [www.circuitcity.com](http://www.circuitcity.com), [Costco Wholesale](http://www.costco.com), [www.radioshack.com](http://www.radioshack.com), [www.samsclub.com](http://www.samsclub.com), [www.compusa.com](http://www.compusa.com), [www.amazon.com](http://www.amazon.com).

Exhibit 2. [REDACTED]

